

HVAC MISC. PRESCRIPTIVE REQUIREMENTS:			MECH-4-C
PROJECT NAME		DATE	

FAN POWER CONSUMPTION §144(c)

NOTE: Provide one copy of this worksheet for each fan system with a total fan system horsepower greater than 25 hp for Constant Volume Fan Systems or Variable Air Volume (VAV) Systems when using the Prescriptive Approach.

A	B	C	D	E	F
FAN DESCRIPTION	DESIGN BRAKE HP	EFFICIENCY		NUMBER OF FANS	PEAK WATTS $B \times E \times 746 / (C \times D)$
		MOTOR	DRIVE		

<p>FILTER PRESSURE ADJUSTMENT Equation. 144-A</p> <p>A) If filter pressure drop is greater than 1 inch W. C. enter filter pressure drop. SP_a on line 4 and Total Fan pressure SP_f on Line 5.</p> <p>B) Calculate Fan Adjustment and enter on line 6.</p> <p>C) Calculate Adjusted Fan Power Index and enter on Row 7</p>	Total Adjustments		
	1) Total Fan System Power (Peak Watts, Sum of Column F)		
	2) Supply Design Airflow (CFM)		
	3) Total Fan System Power Index (Row1/Row2) ¹ W/cfm		
	4) SP_a		
	5) SP_f		
	6) Fan Adjustment = $1 - (SP_a - 1) / SP_f$		
7) Adjusted Fan Power Index (Line 3 x Line 6) ¹ W/cfm			

1. TOTAL FAN SYSTEM POWER INDEX or ADJUSTED FAN POWER INDEX must not exceed 0.8 w/cfm, for Constant Volume systems or 1.25 w/cfm for VAV systems

ITEM or SYSTEM TAG(S)				
PRESCRIPTIVE MEASURES	T-24 Section	Capacity	Exception	Notes
Electric Resistance Heating ¹	§144 (g)			
Heat Rejection System ²	§144 (h)			
Air Cooled Chiller Limitation ³	§144 (i)			

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| 1. Total installed capacity (MBtu/hr) of all electric heat on this project exclusive of electric auxiliary heat for heat pumps. If electric heat is used explain which exception(s) to §144(g) apply. |
| 2. Are centrifugal fan cooling towers used on this project? (Enter "Yes" or "No") If centrifugal fan cooling towers are used explain which exception(s) to §144(h) apply. |
| 3. Total installed capacity (tons) of all chillers and air cooled chillers under this permit, If there are more than 100 tons of air-cooled chiller capacity being installed explain which exception(s) to §144(i) apply. |
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